Supporting Information

for

Facile Fabrication of Heterostructured cubic-CuFe$_2$O$_4$/ZnO Nanofibers (c-CFZs) with Enhanced Visible-light Photocatalytic Activity and Magnetic Separation

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Preparation of c-CuFe$_2$O$_4$ nanofibers.

The c-CuFe$_2$O$_4$ nanofibers were prepared via a simple and economical technique of electrospinning technique combined with coprecipitation method. From figure S1 and S2, the main crystal peak position (311) and the morphology of c-CuFe$_2$O$_4$ nanofibers changed under different temperature. Comparing the results of XRD patterns and SEM images, the c-CuFe$_2$O$_4$ nanofibers prepared at 600 °C was the best calcination temperature.

**Figure S1** XRD patterns of c-CuFe$_2$O$_4$ nanofibers prepared under different temperature: (a) 500 °C, (b) 600 °C, (c) 650 °C, (d) 700 °C.

**Figure S2** SEM images of c-CuFe$_2$O$_4$ nanofibers prepared under different temperature: (a) 500 °C, (b) 600 °C, (c) 650 °C, (d) 700 °C.
**Figure S3** The change of the absorption spectra of RhB solutions with irradiation time under visible light at the presence of c-CFZs.

**Figure S4** The changes color of RhB solutions (a) before the degradation: 0 h, (b) after the degradation: 6 h.

**Figure S5** XRD patterns of ZnO particles.